

# Chapter 10

## Landfill Disposal

This chapter describes the Clark County regional disposal system for municipal solid waste (MSW), including transportation to and landfill disposal at Finley Buttes Landfill in Eastern Oregon. Landfill siting and land use criteria are described in the *Appendices*; historical data on Clark County's landfills and disposal tonnage is also found in Chapter 2: *Background and Waste Stream Characterization*, construction and demolition waste disposal is discussed in Chapter 12 *Construction and Demolition*.

### Introduction

RCW 70.95 establishes priorities for the handling and disposal of solid wastes. These priorities in descending order are:

- waste reduction;
- recycling, with source separation of recyclable materials;
- energy recovery, incineration or landfilling of separated wastes;
- energy recovery, incineration or landfilling of mixed wastes.

The County and cities within the County (Cities) are committed to minimizing the amount of waste being disposed through the implementation and maintenance of aggressive waste reduction (Waste Prevention and Reduction Chapter) and waste recycling programs (Waste Recycling Chapter). After waste reduction and recycling, the remainder of Clark County's waste is landfilled.

Landfilling is an important element of the solid waste system. WAC 173-304 defines a landfill as "a disposal facility or part of a facility at which solid waste is permanently placed in or on land." A land-spreading disposal facility is defined as "a facility that applies sludge or other solid wastes onto or incorporates solid waste into the soil surface at greater than vegetative utilization and soil conditioner/immobilization rates." A more descriptive definition of a landfill, modified from a definition first developed by the American Society of Civil Engineers, is "an engineered method of disposing of solid wastes on land in a manner that protects the environment, by spreading the waste in thin layers, compacting it to the smallest practical volume, and covering it with soil by the end of each working day."

*The Guidelines for the Development of Local Solid Waste Management Plans and Plan Revisions* (WDOE 90-11) defines "waste export" as the hauling of solid wastes generated within a planning area (Clark County) to processing and/or disposal sites outside of the planning area.

## State Legislation and Regulations

### **Washington Administrative Codes (WAC) 173-304, Minimum Functional Standards for Solid Waste Handling**

RCW 70.95 directs the Department of Ecology to develop solid waste handling Minimum Functional Standards (MFS). These standards, found in WAC 173-304, state siting criteria, design and performance standards and closure and post-closure maintenance requirements for solid waste landfills and other handling facilities. For the most part, the MFS meet Subtitle D of the Resource Conservation and Recovery Act (RCRA) and provide additional protection. The MFS rules are currently in a revision process. The MFS are incorporated and adopted into Clark County Code, Chapter 24.12.040, and SWWHD Resolution 87-53.

### **Revised Code of Washington (RCW) 70.95 Washington Solid Waste Management Reduction and Recycling Act**

RCW 70.95 requires that solid waste management plans include a “review of potential areas that meet the siting criteria as outlined in RCW 70.95.165 and WAC 173-304-130.” Although MSW handling systems in Clark County are expected to continue to rely on the exportation of MSW to out-of-county disposal sites, special-purpose landfills for the disposal of other types of waste could be considered. The Plan’s siting review provides a method to identify general areas that may be suitable for the development of a landfill. In the 1990’s, new criteria for the location of MSW landfills were adopted at the federal level as part of RCRA.

### **Oregon Revised Statute 459.055, Solid Waste Control (State of Oregon)**

*Chapter 459.055, Landfills in Farm Use Area; Waste Reduction Programs*, is an Oregon Revised Statute (ORS) law that requires out-of-state local governments to implement waste reduction and recycling programs that are at least as effective as programs in similar Oregon jurisdictions, before exporting wastes into Oregon for landfill disposal. The program requires the owner/operator of any landfill that will be accepting out-of-state wastes to apply to the Oregon Department of Environmental Quality (DEQ) and have their application accepted.

### **Oregon Administrative Rule 340-93-97, Solid Waste Management in General (State of Oregon)**

Oregon Administration Rule (OAR) 340-93-97 is an Oregon regulation that establishes permitting, closure, financial assurance and engineering requirements for landfills, incinerators, composting facilities, sludge land application sites and solid waste transfer stations. The standards are enforced by the Oregon DEQ.

## Existing Conditions

This section describes Clark County’s current MSW landfill disposal system. This system includes the transporting of MSW from the County’s transfer stations [Central Transfer and Recycling Center and (CTR) and West Vancouver Materials Recovery Center (West Van)] to the landfill at Finley Buttes for disposal. Since the MSW is disposed in Oregon, ORS 459.055 (waste reduction and recycling) and OAR 340-93-97

(landfill standards) apply to the County. Disposal of special wastes (such as: asbestos, petroleum-contaminated soils, biomedical wastes and bulky wastes) is described in the *Special Wastes Chapter*; construction and demolition waste disposal is addressed in the *Construction and Demolition Chapter*.

## **Waste Export Program**

Clark County and the City of Vancouver have contracted with Columbia Resource Co. (CRC) to receive and process MSW and to transport and dispose non-recycled MSW generated in Clark County. The initial terms of the contracts are for 20 years; with both ending on December 31, 2011. Clark County and the City of Vancouver each have the option of extending their respective contracts for up to two 5-year extensions. The waste transfer and additional materials recovery elements of the CRC contracts are described in the Waste Transfer and Material Recovery System Chapter. In 1999 Waste Connections, Inc. purchased CRC and the Finley Buttes Landfill, as well as an additional landfill in Wasco County, Oregon.

The State of Oregon, under ORS 459.055, requires local governments, outside of Oregon, to implement waste reduction and recycling programs if they transport waste to Oregon landfills. These programs must be at least as effective as Oregon programs in similar jurisdictions. The local government programs must apply to and be accepted by the Oregon DEQ, before wastes can be exported to Oregon.

Some other MSW export practices are known to exist including the following:

- Woodland area (far northwest Clark County) wastes are collected by Ted's (WUTC-certificated collection company) and transported to the Cowlitz County Landfill.
- Some self-haul wastes generated in the eastern, northern and southern portions of the County are transported into Skamania County, Cowlitz Counties, and the Portland, Oregon area, respectively.

## **Transport System**

CRC is responsible, by long-term contract, for the transportation of all "non-recycled" waste from Clark County to Finley Buttes Landfill in Morrow County, Oregon. The contract requires transport by barge or by rail, allowing truck transport only if specifically authorized by the County under unusual circumstances or certain economic conditions. The current process for transporting non-recycled MSW to the final disposal site at Finley Buttes Landfill is as follows:

- after the MSW is processed at the CTR and the West Van facilities to recover recyclable materials, the remaining non-recyclable MSW is compacted and then sealed into shipping containers;
- the sealed containers are then hauled directly to the Tidewater M-5 barge loading facility where there are placed on barges;
- Tidewater Barge Lines transports the barges 180 miles upriver to the Port of Morrow in Morrow County, Oregon;
- at the port, the sealed containers are unloaded from the barges for later transport by trucks approximate 12 miles to the Finley Buttes Landfill;

- at the landfill, the containers are tipped and the MSW is emptied into the active cell of the landfill;
- empty containers are then returned to the Port of Morrow for barge transport back to Clark County.

The loading and unloading capacity of the existing crane at the Port of Morrow is approximately 15 containers per hour, or 330 containers per day during a three-shift work day. An excess number of shipping containers are required by the CRC contract to temporarily hold up to six days of waste. These extra containers provide standby waste storage capacity in the event that waste transport services are interrupted. In addition, during the two weeks each year when the navigation locks on the Columbia River are closed for routine maintenance, or in the event of unanticipated locks closures, containers can be shipped by truck or train.

Each shipping container holds approximately 30 tons of MSW and has an internal volume of approximately 90 cubic yards. The existing staging yard behind the dock has a storage capacity of approximately 500 containers. Two sizes of barge systems are used for transport. The smallest barges carry up to 36 containers; the largest carry up to 80 containers. Based on the tonnage of non-recycled waste exported to Finley Buttes Landfill, the average number of loaded shipping containers transported upriver and through the Port of Morrow was about 150 containers per week in 1998.

A backup disposal facilities plan was submitted to the County by CRC in 1992. The Plan describes the designated alternative disposal sites if Finley Buttes Landfill ceases operations, either temporarily or permanently. CRC has backup disposal agreements with both Columbia Ridge Landfill in Gilliam County, Oregon, operated by Waste Management, Inc., and Roosevelt Regional Landfill in Klickitat County, Washington, operated by Allied Waste. In addition, a landfill in Wasco County, Oregon is owned and operated by Waste Connections Inc. Both truck and rail transport are available to these backup sites.

## Landfill Disposal Sites

### Finley Buttes Landfill

Finley Buttes Landfill is located in Morrow County, Oregon, approximately 180 miles east of Clark County and approximately 12 miles south of Boardman, Oregon. The facility is owned and operated by Finley Buttes Landfill Company and is the designated disposal site for MSW generated within Clark County. The landfill is designed, constructed and operated to be in compliance with all requirements of the Oregon DEQ and EPA Subtitle D MSW landfill requirements.

The projected life of the current permitted landfill exceeds the 20-year period covered by this Plan. Finley Buttes Landfill occupies a permitted 510-acre site. The estimated available fill capacity at the site, as currently permitted by the Oregon DEQ, is 90 million tons of MSW.

The design of the landfill incorporates features to protect groundwater and surface water, prevent soil erosion, provide fire protection, allow ease of access and manage and control landfill gas and leachate. The site is designed to be compatible with the surrounding land use, both during the active life of the landfill and after the landfill closes. Special operating procedures are used to prevent nuisances and threats to human health and the environment by controlling litter, odors, birds and vectors.

Wastes defined and regulated as “hazardous” under Oregon and federal laws are prohibited from being disposed at Finley Buttes. Surveillance by landfill personnel and regulatory agencies, record-keeping and reporting activities and shipping documentation requirements lower the potential for the disposal of hazardous wastes into the landfill. Personnel are trained to recognize and manage hazardous and other prohibited materials. The contract with CRC indemnifies the County against any pollution-related liabilities associated with waste disposal at Finley Buttes Landfill. Even though this indemnification and other similar indemnification clauses in waste export contracts have not yet been legally tested, there is no evidence of significant legal exposure to Clark County.

## **Abandoned and Closed Landfill Sites**

Clark County has many small abandoned and closed landfills. Documentation on sites, which could contain MSW and special wastes, is limited. More detailed descriptions of abandoned and closed landfill sites in Clark County are presented in *Issue Paper #9: Landfills* prepared by the Groundwater Advisory Committee of the Intergovernmental Resource Center. These detailed descriptions include site locations, operation dates, closure dates, monitoring data, risk assessments and current regulatory status. Table 10-1 summarizes the known sites in Clark County. The listing order of the sites in the table is not based on their relative liability or contamination.

### **Leichner Landfill**

The Leichner Landfill was the last MSW landfill in Clark County. This facility, owned by Leichner Brothers Land Reclamation Company, was permitted to operate as a sanitary landfill and to receive MSW and some CDL wastes. The landfill site is located in the south-central part of the County in the Orchards/Five Corners area.

Under an order from the Department of Ecology (Ecology) the Leichner Landfill ceased operations on December 31, 1991. After it closed, a final cover system was constructed above the previous waste disposal areas and related environmental control systems were installed. Final closure activity at the site was completed in September 1992. A groundwater “pump and treat” system was designed and constructed on the site later as part of a landfill remediation program. In December 1988, prior to the landfill closure, Clark County and the City of Vancouver entered into an agreement with its owner which gave the County and the City a significant role in overseeing the closure and groundwater remediation at the landfill.

**Table 10-1  
Abandoned and Closed Disposal Sites in Clark County**

<b>Landfill Name</b>	<b>Operations</b>	<b>Location</b>	<b>Comments</b>
Circle "C" Landfill	to 1990	31313 Paradise Point Park Road	Closed multiple purpose landfill. Gas collection and groundwater monitoring.
Leichner Landfill	1937 to 1991	9411 N.E. 94th Ave.	Currently under post closure permit through SWWHD. Gas collection and groundwater monitoring.
Cherry Grove Landfill	1963 to 1975	N.E. 249th St. near N.E. 92nd Ave.	Originally closed in 1970 by order of Southwest Washington Health District.
English Pit Landfill	1940 to 1979	192 N.E. 92nd Ave.	MSW Landfill site has received "engineered" final cover.
Pacific Wood Treating	1979 to 1983	3700 N.W. 289th St.	Site ranked by Ecology as "Contaminated."
Plew's Disposal	1960s to 1974		Also known as Turnbull Landfill
Walz Demolition	to 1988	N.E. 6th St. near Garrison Square	Filled old gravel pit - closed CDL Landfill gas monitoring.
Clark County Landfill I	1920s to 1940s	N.E. 192nd Ave. near S.E. 11th St.	Filled old gravel pit.
Clark County Landfills II and III	mid 1970s	S.E. 15th St. & S.E. 164th Ave.	Filled two gravel pits.
Roy Elmer Landfill	1930s to 1970s	27000 N.E. 269th St.	Ravine filled with waste.
Camas Landfill	1920s to 1950s	Near Camas High School	Residential and industrial waste.
International Paper Landfill	1954 to 1979	Healy Road Amboy, Washington	Site ranked by Ecology as "Contaminated."
Al Angelo's Landfill	late 1960s	N.E. 18th St., near Evergreen High School	None
Larch Mountain site	Unknown	15314 N.E. Dole Valley Yacolt, Washington	Site ranked by Ecology as part of toxics cleanup program, due to confirmed presence of hazardous substances.
Toftdahl Drum site	Unknown	22033 N.E. 189th St. Brush Prairie, Washington	Site off list. No further action.
Allied Chemical Corporation	Unknown	West 26th St.	No further action.
Kelly Road Landfill	Unknown	N.E. Kelly Road	Filled old gravel pit.
Hillside (Nieme) Landfill	mid-1970s	Nieme Road	None
George Sellinger Landfill	Unknown	25212 N.E. 77th Ave.	None

**Table 10-1  
Abandoned and Closed Disposal Sites in Clark County**

<b>Landfill Name</b>	<b>Operations</b>	<b>Location</b>	<b>Comments</b>
Doyle Gravel Pit	Unknown	N.E. 142nd Ave.	None
Bill Fleming site	Unknown	5600 N.E. 78th St.	None
Bridges Dump site	Unknown	4200 N.E. 62nd Ave.	None
79th Street Landfill	to 1989	78th St. east of 94th Ave.	Clarifier solids (Boise Cascade) and CDL - including tires.
Fort Vancouver site	1845 to 1930	Covered by intersection of Highway 14 and I-5	Probably the first landfill in Clark County.
Vancouver City Landfill 1	1951 to 1953	North of 4th Plain & west of Clark County Building	Student housing built over and/or in the area.
Vancouver Barracks and Veterans Hospital site	Unknown	under I- 5	Wastes from the Vancouver Barracks and Veterans Hospital.
Vancouver City Landfills 2 and 3	1934 to 1937	North of 39th St. near "S" St.	None
County Dump site	Unknown	Hazel Dell Road	Waste dumped in a large pit.
Carl L. Meyer site	Unknown	2818 N.E. Cherry Road	None
Leonard Ek	Early '90's	15800 NE 99th Avenue	5-acre gravel mine filled w/unknown demolition waste.
Alcoa-Vancouver	Unknown	5701 N.W. Lower River Road	Confirmed hazardous substances site; on National Priorities List (NPL) with Ecology (state). Lead cleanup in progress.
Columbia Pest Control Dump	Unknown	8405 Calef Road	Site reported to Ecology as potential hazardous substances site.
Dewils Industries Dump	Unknown	6307 N.E. 127th Ave.	None
Dietrich Demolition Pit	1950s to 1992	11034 N.E. 117th Ave.	Operator ceased accepting waste in March 1992. Closed CDL Landfill.

<sup>a</sup>Adapted from Issue Paper #9: Landfills, prepared by the Ground Water Advisory Committee of the Intergovernmental Resource Center in August 1990.

## **Needs and Opportunities**

### **Capacity and Reliability of the Barge-Based Transportation System**

Unloading containers at the Port of Morrow could be affected by planned reductions in the water levels of the Columbia River. The pool elevation behind the John Day Dam

could drop as a result of efforts to better protect Columbia River salmon under the federal Endangered Species Protection Act. The U.S. Army Corps of Engineers is currently planning some dredging of the navigation channel at the Port. This is in response to the initial dropping of the pool elevation by 3 feet. However, loading and unloading operations at the Port of Morrow are not expected to be significantly affected in the future. CRC has the ability, and is permitted by contract agreement, to transport by rail and by truck (if certain economic conditions exist) as alternatives.

### **Capacity of Finley Buttes Landfill**

Finley Buttes Landfill occupies a permitted 510-acre site. The landfill is designed to be filled in phases over an estimated life that significantly exceeds the 20-year planning period covered by the county's Solid Waste Management Plan. The estimated available fill capacity at the site, as currently permitted by the Oregon DEQ, is 90 million tons of MSW. Over the 20-year period covered by the plan, Clark County's estimated waste tonnage to be disposed is about 3 million tons.

### **Regulatory Restrictions**

Potential regulatory issues which could affect the CRC contract are:

- Possible State of Oregon regulatory or economic restrictions on out-of-state import of MSW;
- Additional state of Oregon requirements for reduction, separation and recycling of MSW.

Given the economic investment and political impact that the large private regional landfill corporations maintain, as well as recent federal judicial decisions, it appears unlikely that the states of Washington or Oregon would be able to legislate a total ban on import or export of MSW.

### **Cancellation of Contracted Services**

The contract with CRC provides Clark County and the City of Vancouver the right to cancel contracted transportation and disposal services under the following conditions:

- Any change in Washington law that requires a county or city to incinerate waste or dispose wastes at a disposal site in Washington state;
- Any change in Washington law that prohibits disposal of Clark County wastes at the Morrow County facility, unless CRC offers to use an alternative disposal site that is acceptable to the County with no change in CRC's fees;
- Any change in Oregon law that would result in an increase of more than 15 percent in the fee paid to CRC, unless CRC elects to limit the increase to 15 percent or less;
- Any significant environmental or ecological risk created or increased by disposing of Clark County wastes at Finley Buttes Landfill.

Clark County is also entitled, under certain conditions, to cancel the associated transportation services, if the County or the City of Vancouver cancels contracted waste



disposal services. These services could be canceled if the current transportation system is not feasible or cost-competitive for use with a replacement disposal system.

## **Future Planning**

Even though the County has executed a 20-year contract with CRC for MSW transport and disposal services, future transport and disposal planning options should be considered to temporarily handle unexpected interruptions in service and for exploring new options when the contract reaches extension or completion dates.

## **Alternatives**

*1: Honor the existing contract for garbage export to Finley Buttes Landfill in Boardman, Oregon for its duration, but consider alternatives for the next contract.*

*2A: Buy Out or Cancel Portions of the CRC Contract, with County and City Development of New Landfill*

*2B: Buy Out or Cancel Portions of the CRC Contract, with Multiple Private Service Provider System*

## **Evaluation of Alternatives**

*1: Honor the existing contract for garbage export to Finley Buttes Landfill in Boardman, Oregon for its duration, but consider alternatives for the next contract.*

Alternative 1 is basically a “no-action alternative.” By continuing the existing waste export system to Finley Buttes Landfill, Clark County would avoid the additional capital costs and investments associated with siting and construction of new facilities. Even though Finley Buttes Landfill is about 180 miles from Vancouver, the landfill is in an arid region with favorable geology and hydrology for a landfill. The landfill space is adequate to handle the County’s waste tonnage. In addition, the primary barge transport system has backup rail and trucking options. Transportation by truck is immediately available and is currently used during annual maintenance on the Columbia River System. The rail option would make it necessary to site and develop specialized loading facilities, requiring a minimum of six months to develop. The current landfill site and transportation system features minimize the potential for service disruptions.

Alternative 1 appears to provide Clark County with a relatively low level of environmental risk. The contract with CRC indemnifies the County against any pollution-related liabilities, associated with waste disposal at Finley Buttes Landfill. Even though this indemnification and other similar indemnification clauses in waste export contracts have not yet been legally tested, there is no evidence of significant legal exposure to Clark County.

*2: Clark County and/or the City of Vancouver could consider buying out or canceling portions of the CRC contract for solid waste transfer, transport and out-of-county disposal.*

The annual adjustment of CRC's fee for waste transport and disposal services is a potentially unfavorable aspect of the long-term contract. Starting in 2001, the fee may be adjusted each year up to a rate of 82% of the increase (or decrease) in the CPI for the Portland-Vancouver metropolitan area, per Article 10 of the contract. Over an extended time, these annual adjustments could increase the costs of the CRC waste export services to levels significantly higher than those of other transportation and disposal options. However, it is also possible that over an extended time, these annual adjustments could result in a CRC-contracted cost lower than that of other waste export options. For example, fuel costs associated with the transportation of waste could increase much faster than the rate of general inflation (CPI). These increases could cause other options to be more costly than the CRC contract. These other disposal options are considered in Alternatives A and B.

*A: With County and City Development of New Landfill*

This alternative would have Clark County and/or City of Vancouver buying out the waste export and disposal portion of the CRC contract and the County and/or cities developing, and possibly operating, a new sanitary landfill. Under Alternative 2A, the transfer station operations portion of the current CRC contract would stay in effect. Alternative 2A may require the County and any other participating local governments to site and permit a sanitary landfill either in Clark County or close to it. The risks and uncertainties of such a siting attempt and the potential impact on the local community could be significant. In addition, the costs of Alternative 2A are largely unknown because of the uncertain nature of cost to buy out the CRC contract. The contract requires the County to fully compensate CRC if a replacement waste stream for Finley Buttes Landfill is not found. If a replacement stream is found, the buyout cost could be low.

Under Alternative 2A, potential liabilities related to pollution and nuisances would increase, if the County directly owned or operated a disposal site. Subtitle D requirements are stringent and could make this approach cost-prohibitive, especially with MSW landfills being regulated by the Clean Air Act. This requires a "Title 5" air permit for MSW landfills with capacity greater than 2.8 million tons. In addition, there could be an increase in traffic within Clark County, resulting from an in-county landfill.

*B: With Multiple Private Service Provider System*

This alternative would also include Clark County and/or City of Vancouver buying out the waste export and disposal portion of the CRC contract. This alternative would be necessary if the county were to move forward to either deregulate its disposal system or contract with more than one service provider before the contract with CRC expires. Under this alternative, the County would contract with a new waste export vendor or vendors to take over transportation and disposal services, in place of CRC. Under Alternative 2B, the transfer station operations portion of the CRC contract would stay in effect. A variation of this alternative would include the County buying out the disposal portion of the CRC contract, but retaining the barge-based transportation system. Under this option, barges would deliver the containerized MSW to other regional landfill sites.

Alternative 2B would require the County to find and contract with a different private service provider for long-term transport and disposal services. Such a contract

probably would be similar to the current CRC contract, but could be negotiated to include a lower cost to the County for the waste export services. At least three major private regional landfill vendors in Southern Washington and Northern Oregon are providing waste export and disposal services. These include Finley Buttes Landfill (CRC), Columbia Ridge Landfill in Gilliam County, Oregon (Waste Management, Inc.) and Roosevelt Regional Landfill in Klickitat County, Washington (Allied Waste). All three facilities contract for waste from several jurisdictions, with some flexibility in pricing their disposal services. It could be in the County's best interests to occasionally review the fees for waste export services charged by vendors other than CRC.

If CRC and the County find a replacement waste stream, the buyout cost to terminate the waste export portion of the CRC contract would be very low. If these conditions were to become reality, the county would be best served by considering alternate proposals.

### **Estimated Cost Impacts**

Estimated cost impacts of continuing with the existing system or buying out portions of the CRC contract are shown in Table 10-2. These estimates are based on the work which was provided for the 1994 Plan.

**Table 10-2  
Landfill Disposal Alternatives Evaluation**

<b>Alternative</b>	<b>Estimated Additional Investment and Operating Cost.</b>	<b>Estimated Full Waste Transfer and Disposal System Cost in 1992 dollars.</b>	<b>Estimated Transportation and Disposal Cost Only in 1992 dollars.</b>
<b>Alternative 1</b> Continue with existing single private service provider system, including disposal at Finley Buttes Landfill.	No additional investment or cost.	\$59.81/ton in 1992 or \$8.97 million, based on 150,000 tons/year.	\$35.14/ton in 1992 or \$5.27 million, based on 150,000 tons/year.
<b>Alternative 2A</b> Buyout waste transportation and disposal portion of CRC contract and have County or Cities develop a new sanitary landfill.	Estimated buyout cost of \$3.6 million in 1992 dollars <sup>a</sup> + \$17 million initial investment + \$3.5 million annual operating cost for landfill and waste delivery <sup>d</sup>	Estimated transfer station cost of \$24.67/ton in 1992 <sup>b</sup> + waste delivery and landfilling cost of \$36.93/ton in 1992 <sup>c</sup> + buyout cost amortization of \$2.88/ton <sup>c</sup> = a total of \$64.48/ton.	\$36.93/ton in 1992 or \$5.54 million, based on 150,000 tons/year.
<b>Alternative 2B</b> Buyout waste transportation and disposal portion of CRC contract and have County or Cities contract for waste export services with another private service provider.	Estimated buyout cost of \$3.6 million (\$1992) <sup>c</sup>	Estimated transfer station cost of \$24.67/ton in 1992 <sup>b</sup> + waste delivery and landfilling cost in the \$40-\$60 per ton range + buyout cost amortization of \$2.88/ton.	\$40 - \$60 per ton in 1992.

<sup>a</sup>Excludes County administrative fee and Lechner Landfill groundwater “pump and treat” operation and maintenance costs.

<sup>b</sup>Based on the 1992 cost breakdown of \$24.67 for transfer stations and recycling, \$13.39 for transportation, and \$21.75 for disposal, as stated in the Columbia Resources Company (CRC) contract.

<sup>c</sup>Contract buyout cost of \$3.6 million based on 50 percent of obligated Clark County waste stream having been disposed at Finley Buttes Landfill and no replacement waste stream available to CRC.

<sup>d</sup>Initial investment of \$17 million based on \$2 million for land, \$3 million for permitting and engineering, \$2 million for site work, \$4 million for initial disposal cell, \$3 million for on-site operation and maintenance and environmental control facilities, \$1 million for off-site work and \$2 million for landfill equipment.

<sup>e</sup>Based on an annual capital recovery factor of 0.12 and 150,000 tons/year of MSW.

## Recommendations

1. *Honor the existing contract for garbage export to Finley Buttes Landfill in Boardman, Oregon for its duration, but consider alternatives for the next contract.*

The current system of barge transport and MSW disposal at Finley Buttes Landfill appears to be adequate for the present and for the 20-year planning period for the county’s waste handling and disposal needs. The County and cities should re-examine this judgment when the contract comes up for renewal or expires.

- 2. Clark County and/or the City of Vancouver could consider buying out or canceling portions of the CRC contract for solid waste transfer, transport and out-of-county disposal.*

The County and cities should periodically evaluate, concurrent with the Plan updates or periodically, the option of buying out the transfer, transport and/or disposal portion of the existing CRC contract.